

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
30 June 2005 (30.06.2005)

PCT

(10) International Publication Number  
WO 2005/058702 A1

(51) International Patent Classification<sup>7</sup>:

B65B 35/20

(81) **Designated States** (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:

PCT/SE2004/001720

(22) International Filing Date:

24 November 2004 (24.11.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0303424-6 16 December 2003 (16.12.2003) SE

(84) **Designated States** (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **PERSSON, Richard** [SE/SE]; Vitklövervägen 15, S-261 71 Landskrona (SE).

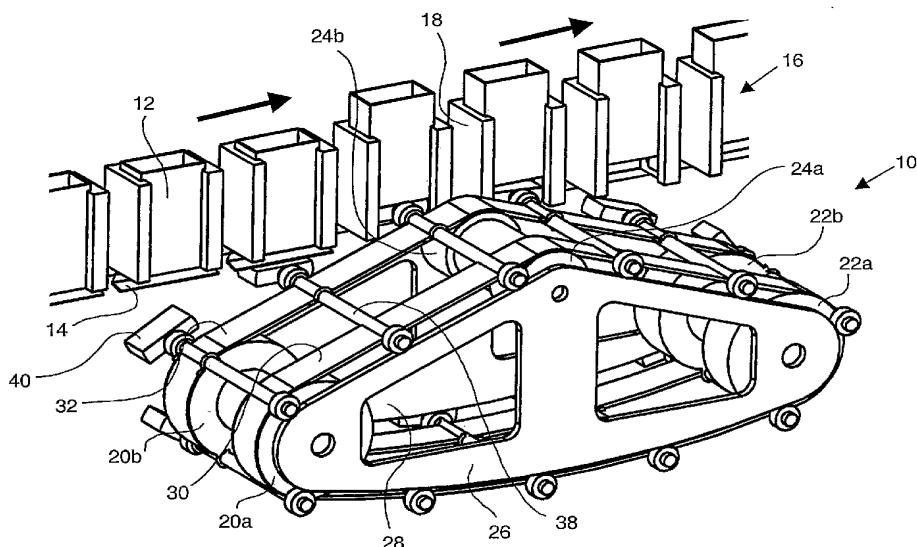
(74) Agent: **AHL, Camilla**; AB TETRA PAK, Patent Department, Ruben Rausings gata, S-221 86 Lund (SE).

**Published:**

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: AN APPARATUS FOR PUSHING PACKAGING CONTAINERS



(57) **Abstract:** The disclosure relates to an apparatus (10) for pushing a number of packaging containers (12) which are supported in cassettes (18) in motion in a first direction in a packaging machine. The apparatus (10) comprises carriers (40) by means of which the packaging containers may be pushed from a first position to a second position in relation to said cassettes (18). According to the invention, the apparatus (10) comprises at least one belt (30, 32) which, in a first portion of the apparatus (10) moves in a second direction and in the second portion of the apparatus (10) moves in a third direction, and, between the first and the second portions, there is disposed a bending roller (24), and the second and third directions each make an angle (a) with the first direction, and finally the carrier (40) is connected to a shaft (38) which is secured to the belt (30, 32) by means of a clamping device.

WO 2005/058702 A1